A Totally Do-It-Yourself Library without a Library Customer Service Desk: The Singapore Experience

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Abstract

Since 1995 when the National Library was set up as a statutory board, the Board has been experimenting with new services to improve service levels, reducing waiting time and to save customer time in the past 7 years. These include services such as the application of radio-frequency identification tagging to cancel books returned automatically without a staff doing it, a computer station that allows customers to check their loan records and to make payments using a cashcard, and a cybrarian service that allows a customer to speak to a librarian and be guided, without the physical presence of the librarian.

With these automated services in place, the National Library Board decided that it was time to experiment with a concept called the Totally DIY library, to allow the Board to try out the idea of running a library without any staff onsite, yet provide the same level of service to the customers as one with a team of library staff onsite. This new library opened its door to the public on 1 December 2002. The paper describes the prototype.

Background

The National Library was a government department under the Ministry of Information and the Arts until Sep 1995, when it was converted to a statutory board called the National Library Board.
Since then, the NLB has been experimenting with new services to improve its reach and to raise its level of services.

The Totally Do-It-Yourself (DIY) Library Concept was mooted for a year before the Board felt that the time was ripe for the concept to be tried out.

From the time the Board was formed in 1995, several new services were introduced in NLB’s libraries to make library visits hassle-free, enjoyable and enriching. Due to heavy usage on weekends and during school holidays where queuing time could be as long as 45 minutes for returning a book and another 45 minutes to borrow a book, the NLB launched a concerted effort to install self-service machines to remove the queues. This effort was completed in 1998 when all libraries were equipped with 3M self-service machines for borrowing. 24-hour bookdrops were also introduced in all libraries to remove queues in returning and to enable customers to return books on loan anytime of the day or night.

The machines helped to remove queues. However, they did not help much in the returning function as staff was still needed behind the bookdrop to cancel loan of books returned.

Collaboration with a local technology vendor brought about a prototype of the radio frequency tagging (RFID) system which would allow for both the borrowing and returning functions to be automatically handled by the RFID system. This system reduced the returning function to zero queuing time as the loan of any library item returned via the RFID-enabled bookdrop would be cancelled as soon as the item was dropped into the bookdrop. As the book travels down the chute of the bookdrop, a RFID sensor would read the RFID tag and cancels the loan from the library loan system.

Other functions automated included the payment of overdue fines and other payments via a national cashcard used in Singapore, and checking of loan records online and in real-time. These are functions required by our customers often as many of them could not remember the books they had borrowed and had a habit of asking staff to check for them the outstanding items they owed to the library. With these functions, automated payment of fees to the library also became a breeze.

With all the above functions automated, the library asked itself if there were remaining library functions which needed to be automated in order for customers to transact every function on their own without the assistance of library staff.

We found two such functions: registration of new members and the enquiry service.

Work on these functions started as part of the plan to prototype the Totally DIY library without stationing library staff onsite. This new library was to be called the SengKang Community Library (SKCL).
Registration of new members: This was an interesting development as the project team struggled with whether we would ask customers to produce their personal identification documents before the library would proceed to register them as new members. The project team decided to take a risk in implementing this new DIY service, and a decision was made not to ask the customer to show their identification documents to staff before activating the membership. Instead, library staff would monitor if there was any abuse of the system after implementation. Fortunately, to-date, there has not been any report of abuse.

A kiosk was designed to provide this new service, and focus groups were brought into the library to test the service before it opened to the public. Most customers were able to follow the user instruction on the screen without much assistance. Some feedback was gathered and improvements were made to the service before it was launched to the public on 1 Dec 02 when the library was opened officially for business.

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**How to use the Membership Registration Kiosk**

- Select desired function on the touch screen by pressing on it.

  Follow the rest of the steps shown on the screen.

- Select the supporting document you wish to use:

  If you are using a

  - NRIC / School Smart Card / Membership card, place the card into the slot with the barcode facing away from you. Remove the card when your NRIC number appears on the screen.

  - Birth Certificate (to register a child), enter the Birth Certificate number as shown.

- Collect your membership card at the end of the transaction.
Remote enquiry service – Cybrarian service

The other service that was developed for this new library was the Cybrarian service. This uses the idea of a PC-based co-browsing service where the librarian sits offsite in another library, while the customer making his enquiry would ask his question from a kiosk at the library, wherever it is.

The NLB had experimented with this service in 1998 at another library using the video-conferencing facility. When first tried out, both the librarian and the customer could see each other on the screen that they both were looking at. However, feedback from the customers was that they would prefer not to see their own faces on the screen when using the service.

With this customer feedback, the team decided that the second iteration of the cybrarian service would not include the cameras to capture the faces of the customer and librarian, and only the telephone and the co-browsing facilities were provided. Two such stations were installed in the library to provide customers with a remote enquiry service in the SengKang Community Library.

Results of the prototype

On the first day of the opening of the SKCL, over 12,300 people visited the library, borrowing a total of 13,900 library items. 128 new members registered themselves, and 255 enquiries were made via the Cybrarian service.
It was interesting to note that the usage levels were about the same as any other new library opening, even though the library had no staff onsite.

Feedback from customers was mostly positive. There was some feedback about the noise level. However, this was expected as the first opening day usually drew larger than usual crowds.

The NLB is tracking the effectiveness of this library. So far, usage has been very encouraging, and enquiries from the library are still comparable to other similar libraries in the system.

Conclusion

The Totally DIY library is an interesting and exciting prototype for the NLB. While the NLB does not intend to implement this concept in every one of its 22 libraries, it is planning to implement it in a few other libraries in shopping malls to reduce the operating costs, and more importantly, to extend opening hours where there is a need. In fact, the reason for prototyping this new concept is to enable the NLB to open longer hours into the night (say, up to mid-night on certain days) if we need to, in order to be accessible to customers who are not able to visit us during our current opening hours. The current hours at our shopping mall libraries are from 11 am to between 8 and 9 pm everyday of the week.

As for the Cybrarian service, we would like to extend this as a service that can be provided anywhere round the island, and in time to come, anywhere outside Singapore, where there is demand. This service would allow our customers to reach us from anywhere without visiting our physical library, yet be guided in their search for information, online and in real-time. It will also allow our librarians to work from home or from anywhere, so long as they have connections to NLB resources.

The initial success of the prototype gives us the confidence to move further in this journey to bring library services to more people in a more accessible manner. There is a lot more to do, we
realize, and we will continue to explore other ways to make the access of information to our customers a hassle-free, fun and enriching experience.

The current project that we are working on is to find an easy way to direct our customers from the online catalogue to the bookshelf where the library item is shelved, so as to reduce time taken by the customer to find the item when he is using our collections. This, we hope, will increase the satisfaction of our customers when using our services.

We will continue to explore new possibilities, including using digital media, to reach our customers, and for our customers to reach us.

NGIAN LEK CHOHI

Ms Ngian Lek Choh graduated from the University of Singapore with a B.Sc (Honours) in Physics in 1976, took a postgraduate diploma in Library Science from the University of Wales, UK, in 1981, and a diploma in System Science from the Institute of Systems Science, National University of Singapore in 1985. She also spent a month at INSEAD, France to study Advanced General Management in 2000.

Over the years, she accumulated a strong grounding of public library services and management.

In April 2002, Ngian was appointed Assistant Chief Executive, Operations. In her new capacity, she oversees the operations of the National Library Board, including collection development, service development, programming development and professional development. She also oversees the National Library Board Institute, the training arm of NLB that provides for all training needs for NLB staff and also the information literacy training programmes for staff and end-users.

In April 2003, Ngian took on another new portfolio called the Human Capital Group. She is now responsible for all activities in HR, including training, competency development and succession planning.

Over the past 7 years, the National Library Board (NLB) had evolved and transformed its system of 10 public libraries and 12 community children’s libraries (CCLs) to a system of 22 public libraries and 37 CCLs.
Loans increased from 10 million in financial year (FY) 1994 to 31.7 million in FY2002 and visitors from 6 million to 31.5 million over the same period. Membership increased from 1 million to just over 2 million today.

Ngian played a leadership role in the transformation of the NLB libraries, by increasing the accessibility, reach and convenience of libraries. She believes that library services will continue to evolve, to make library resources more accessible to customers, and to ensure that the use of library services remain as hassle-free, painless, relevant and compelling as possible. She is also confident that libraries will continue to remain useful and relevant to people so long as we professionals keep up-to-date with the fast-changing needs of our customers.

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